

## IMAGE PROCESSING APPARATUS AND METHOD THEREFOR

## Abstract

It is one object of the present invention to prevent embedded verification information from being lost even when a quantization process is performed after verification information has been embedded. A pre-embedding portion 32 converts a image data value so that quantized values not changing by error introduced through the embedding process. A hash value calculator 300 calculates a hash value using image data and key information, and a hash value embedding portion 302 embeds the hash value in the image data. An output format converter 304 quantizes the image data in which the hash value is embedded, and generates JPEG data.